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A closer look at the interactional construction of choral responses in South African township schools

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ABSTRACT

In order to better understand literacy practices in high poverty L2 contexts, we use a conversation analytic approach to study two forms of chorusing in Grade 3 classrooms in South African township schools: choral reading and choral answering. Based on more than 6 hours of video recorded classroom interaction, we show that choral reading aloud is initiated by explicit and implicit instructions, combined with intonational cues. Choral answering is initiated by yes/no questions, designedly incomplete utterances or known-answer questions, producing short answers. Teacher feedback in both forms is extremely limited. Choral practices risk limited individual student engagement and restrict development of language and cognitive skills. However, we also show that students demonstrate a high awareness of the subtleties of a variety of interactional "rules". They are occasionally encouraged to produce their own answers and are capable of reading new pieces of text aloud, showing potential learning opportunities through classroom engagement.

1. Introduction

Mrs B.[1], a primary school teacher in a township school in the Western Cape, South Africa, is doing Mathematics with her Grade 3 class. The children are discussing a math problem about car sales from their textbook for which they need to use the 'key' next to a bar graph. This key tells the children that each picture of a car represents a total of five cars. There are 5 pictures of a car next to the bar graph, indicating that there are 25 cars in total. Nicholas has given the correct answer (25) and the teacher asks him how he got to this answer. The following interaction takes place within this context:

Teacher:	How did you know?
Nicholas:	I looked there on the key
Teacher:	Thank you, the key always helps you. The magic word is the key. The key represents a?
Nicholas:	Car
Teacher:	And one car?
Children in chorus:	Many cars
Teacher:	((laughingly)) Lovely, lovely, we did plurals also yesterday. One car many cars. One car represents how many cars in the key?
Children in chorus:	Five
Teacher:	Five cars

We observed this classroom interaction when Grade 3 learners in a South African township school were engaged in a shared reading activity. This particular interaction caught our attention for two reasons. Firstly, the mutually produced answer 'many cars' by all learners was constructed automatically without any seemingly particular clue provided by the teacher. Secondly, this "unexpected" answer was given by all students at the same time. When offered a turn to answer the question 'And one car?' the learners did not interpret this question as being about the key of the bar graph, but assumed it was about discussing plurals in English, a topic discussed in English class the day before. The teacher laughingly compliments the children (lovely, lovely) and accounts for the chil-

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[1] In order to assure anonymity of the teachers who participated in the study, we refer to them with random letters.

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dren's unexpected response by noting that this answer could be traced to a classroom activity from the previous day, during which the learners studied plurals in English. Only when the teacher repeats her question in expanded form ('one car represents how many cars in the key'), steering heavily towards a one-word number response, do the children provide a chorus answer relevant to the topic that they are actually engaged in: bar graphs.

The example above proved to be one of the many chorus answering instances that we identified during classroom observations in township schools in South Africa's Eastern and Western Cape. Traditional teaching techniques, such as chorus teaching and rote learning, are used in many high-poverty second language (L2) or multilingual classrooms where the use of unfamiliar languages as language of instruction forces teachers to use a more passive teacher-centered approach to teaching, where they do most of the talking (Alidou & Brock-Utne, 2006; Chick, 1996).

Classroom discourse in postcolonial multilingual settings has been widely researched in the African context and research often shows that teacher-dominated discourse is prevalent. Studies from for example Kenya (Bunyi, 1997; Pontefract & Hardman, 2005), Botswana (Arthur, 1996), Burundi (Ndayipfukamiye, 1996), South Africa (Chick, 1996; Hornberger & Chick, 2001) and Tanzania (Mwinsheikhe, 2003; Rubagumya, 2003) emphasize the relationship between the language mismatch (language of instruction versus mother tongue of the learners) and the learner's participation in the classroom. Chimbutane (2011) argues that, in order to ensure fluent classroom interaction in these multilingual contexts, 'there is a tendency to resort to two pervasive discursive strategies: safetalk and codeswitching, which add to the complexity of the canonical patterns' (Chimbutane, 2011, p. 16).

The concept of safetalk was introduced by Chick (1996) in his micro-ethnographic analysis of classroom interactions of English second-language learners in a grade 7 mathematics lesson at a school in KwaZulu Natal, which was formerly referred to as a 'black school'. Taking into account the macro context of schooling for black people under apartheid in South Africa, safetalk represents a style that was developed as a way to cope with the segregation and reality of highly disadvantaged school life for black people under apartheid. Following Chick (1996), it was a way of saving face by hiding their poor command of English and pretending effective learning was taking place. Noteworthy features of the safetalk discourse include chorusing and highly synchronized interactions. The information value of the items chorused is often low, and the function of questions is more to signal participation rather than control levels of understanding. In short, it is a strategy used to hide the fact that little or no learning is taking place and through which learners can join classroom chorusing without understanding what they are saying (Chick, 1996; Hornberger & Chick, 2001).

In this paper we use a conversation analytic approach and focus on the phenomenon of chorusing in Grade 3 classrooms in South African township schools.[2] In order to advance our understanding of the literacy challenges that South Africa is facing, a better understanding of these particular classroom interactions is needed. Whilst most of the (international) large-scale quantitative literacy studies have looked at reading achievement of South African learners, few studies have looked at literacy development challenges through the lens of classroom interaction analysis or discourse analysis. For an exception see the small scale qualitative study of classroom discourse by Chick (1996). Consequently, what exactly happens inside the lower grade classrooms when teachers and students engage with texts remains rather intangible. This paper offers a unique linguistic perspective into student-teacher interaction in high-poverty township schools, during classroom interactions focused around textbooks, posters, handouts, and flash cards. These particular interactions with text are considered to be a potentially valuable support for learning (Nystrand, 1997). Following Walsh (2006), we will refer to these classroom activities that direct the attention of students to a text, a recording or any other learning material, as 'materials mode'.

2. Context

One of the major characteristics of education in postcolonial settings is the linguistic mismatch between the language used at school and the language used at home or in the community. Officially, South Africa has a monolingual orientation in language education policy, whereby children are taught in their mother tongue from grades 1–3 after which English becomes the language of learning and teaching (LoLT). Over the past 30 years scholars have tried to identify and explain the complex multilingual literacy practices in South African township schools. The ground-breaking work by Macdonald in the 1990s, which targeted the language and learning difficulties experienced by grade 5 learners, showed that learners were not ready for the shift from mother tongue LoLT to English (Macdonald & Burroughs, 1991). Consecutive studies over the years have confirmed that the achievement of social and pedagogical goals is debilitated by the national language of instruction policy. The strict use of only one language at a time, as stipulated by the South African curriculum, restricts children's opportunities to participate in the classroom and results in situations where learners do not have a sufficient level of English to be effectively engaged with the curriculum (McKinney, Carrim, Marshall & Layton, 2015; Probyn, 2009). As a coping mechanism, learners resort to strategies such as code-switching and practices whereby they make use of their 'extended linguistic repertoire' (Banda, 2018, p. 199), so that they can move beyond the use of monoglot English (Banda, 2018; Probyn, 2009). As a consequence, classes are characterised by various forms of multilingualism, whereby students have 'deeply ambivalent' attitudes towards the use of English (Kapp, 2004, p. 248).

In addition to the linguistic challenges that learners face, South-Africa's historical legacy still impacts on classroom practices today. Inequalities that originated in the apartheid era are affecting historically African township schools and rural schools today, and these disparities are further affected by poor conditions in the home environment (Amin & Ramrathan, 2009; Department of Basic Education, 2014). For example, the percentage of learners that have their own textbook in schools serving poor communities is low: from 35.6% in Quintile 1 schools[3] to 43.4% in Quintile 3 schools (Spaull, 2011).

South Africa has been confronted with low student achievement in literacy and numeracy for years (Howie & van Staden, 2012; Spaull & Hoadley, 2017). The latest evidence[4] shows that 78% of South African Grade 4 children cannot read for meaning or retrieve basic information from the text to answer simple questions, compared to 4% internationally (Mullis, Martin, Foy & Hooper, 2017). Although large scale assessments such as PIRLS need to be interpreted with caution because of cultural bias and lack of sensitivity to the complex social and cultural context such as South Africa (Abdulatief et al., 2018; Prinsloo &

[2] The wealth of data gathered during this study warranted a separate in-depth analysis of code-switching practices, of which the findings will be published separately (authors, forthcoming).

[3] State aid to public schools in South Africa is determined by socio-economic (SE) factors. Schools serving poor communities receive the most funding. Schools are categorised from quintiles 1 to 5, with quintiles 1–3 being the poorer schools.

[4] Based on the 2016 results of the Progress in International Reading Literacy Study (PIRLS). South Africa participated in the 2006, 2011 and 2016 PIRLS cycles showing consistently low reading comprehension levels of Grade 4 students, irrespective of the eleven official languages in which they were tested.

Krause, 2019), these outcomes show that South African children are not reading as they need to be.

3. Theoretical background

There is general consensus amongst educationalists and linguists that language is fundamental to the process of learning and that group discussions, classroom discourse and interaction play a pivotal part in learning development (Nystrand, 1997). This is particularly important in contexts where the language of instruction at school is different from the language used at home. Classroom discussions are productive when learners are given the opportunity to talk for extended periods of time, discuss texts through open-ended questions, and when the teacher engages in follow-up questions on the student's response (Soter et al., 2008). Discussion about texts creates more extensive use of higher level cognitive processes than if traditional teacher-led recitations are used (Chinn, Anderson & Waggoner, 2001), it impacts positively on reading comprehension (Palinscar & Brown, 1984) and strengthens vocabulary development (Schmitt, 2008). Informed by this evidence, there is a general tendency towards reducing the teacher's control and leaving more space to learners' independent contributions in classroom discourse (cf. Myhill, 2006).

Notwithstanding the evidence that supports classroom dialogue, interactive discussion and social interaction, the way teachers organize instruction in their classrooms often depends on the 'reality on the ground', and not necessarily on the latest research evidence. While we know that addressing the whole class for joint recall is related to lower academic scores, in many countries around the world teachers control the discourse tightly and ask their learners to respond in chorus (Abadzi, 2006), and direct instruction through whole-class teaching is still the commonest teaching approach world-wide (Alexander, 2004). This common use of whole-class teaching can be explained by the fact that most research, including the research that we cited earlier, comes from affluent Western contexts and does not take into account restraining factors typically present in high-poverty contexts, such as lack of resources; large classes; lack of qualified teachers, and a limited knowledge of the language of instruction (Abadzi, 2006; Alidou & Brock-Utne, 2006; UNESCO, 2014). These constraints limit the opportunities for classroom discussions and individual student contributions. From a Western point of view, this leads to teacher-led recitation and ineffective learning. However, teachers in high-poverty contexts have to use the resources at their disposal to the best of their ability. Because large classes provide limited opportunities to question individual students and keep track of individual student performance, choral responses may be a necessary method through which all students can receive some form of feedback on content matter or language of instruction, even if this feedback is acquired through a neighbour's response (Abadzi, 2006). Choral responses provide opportunities for all children to be engaged in a learning activity and Abadzi (2006) argues that they 'are useful when the material is factual and amenable to rote repetition or very short answers' (p.184). Obviously, the non-compulsory character of choral answers makes it unlikely that all students participate. Moreover, choral answers are not suitable for open-ended questions challenging the students to think beyond the text and individual student performance cannot be observed.

Since classroom interaction is about actual interaction between the teacher and students, it is not surprising that the field of conversation analysis has been concerned with analyzing classroom interaction for a long time (see Koole, 2013). Conversation analysis developed as a method to study informal conversations during the 1960's and 1970's, based on the work by Garfinkel within ethnomethodology and the work by Goffman who proposed that conversations have an "interaction order" (see Heritage, 2001 for an overview). Conversation analysis studies the ways in which social interaction is structurally organized in sequences, or as Goodwin and Heritage (1990:283) write: "It seeks to describe the underlying social organization – conceived as an institutionalized substratum of interactional rules, procedures, and conventions – through which orderly and intelligible social interaction is made possible."

Conversation analysts study interaction in both informal and formal (institutional) domains on a micro level in order to understand how talk works, and also how institutions are talked into being (Heritage & Clayman, 2010). For example, when studying interaction between students and the teacher, we come to understand what types of questions lead to what types of responses (Koshik, 2002; Mehan, 1979a). Conversation analytic studies have shown that what we know about turn-taking and sequential organization in informal, everyday conversations can provide important insights into how classroom talk is "ordered" (Koole, 2013). Furthermore, many conversation analytic studies based on classroom talk demonstrate how "learning" is achieved through detailed unfolding of interactional segments between the teacher and student(s) (Emanuelsson & Sahlström, 2008). Such studies can, for example, uncover the friction between teacher control of content on the one hand and student participation on the other hand (Emanuelson & Sahlstrom, 2008). Various interactional strategies can be used by teachers to find an optimal type of interaction in which students "take part" (Emanuelson & Sahlstrom, 2008: 220), but teachers still control content, for example by asking specific types of questions and allowing for errors and repairs.

In our dataset of nine recorded sessions of classroom interaction in high poverty schools in South Africa, we came across a variety of chorally produced responses. At first, these 'choral interactions', seemed to be a form of highly ritualized institutional interaction (Jacknick & Creider, 2018) where children know exactly when to respond in chorus, what to say and how to say it. However, in order to gain a better understanding of these particular forms of choral activities, this study explores choral reading and choral responses in depth. In this paper we go beyond the highly ritualized interactions that make use of formulaic expressions (such as "good morning teacher" or the opening song to a particular lesson). Rather, we want to explore how chorally produced responses by grade 3 learners are interactionally constructed throughout classroom interaction in materials mode within the typical IRF sequence (Mehan, 1979a): initiation, response, feedback. We focus on the following overarching research question: What can we learn from the details of chorusing practices in South African township schools in order to see how it may help or hinder effective learning within the context of high-poverty multilingual classrooms?

The main question is supported by the following two sub-questions:

1 How is chorally produced *reading aloud* initiated, produced, and responded to during classroom interaction in materials mode?
2 How are chorally produced *responses* initiated, produced, and responded to during classroom interaction in materials mode?

3. Data

3.1. Data set

The data studied consist of nine video-recorded lessons (6 hours and 23 minutes in total) from seven Grade 3 classrooms in two different low socioeconomic urban primary schools in South Africa's Eastern Cape and two in the Western Cape. The schools in the Western Cape were situated in Mitchell's Plain, one of South Africa's largest townships, about 30 km from Cape Town.

The schools in the Eastern Cape were situated in Ibhayi, a large high-density township near Port Elizabeth.

The schools in the Western Cape were English Home Language (HL)[5] primary schools, with Afrikaans as their First Additional Language (FAL). English Home Language incorrectly suggests that all teachers and learners are L1 speakers of English. Afrikaans is the most widely spoken home language in Cape Town, and the other two most common languages are isiXhosa and English. The schools from the Western Cape should therefore be considered to be operational in a multilingual context and serving mainly low-income communities. The two schools in the Eastern Cape were isiXhosa HL primary schools, with English as their FAL. These are Quintile 3[6] schools situated in township areas of Port Elizabeth with only English L2 learners. The age of the students was between 8 and 10 years old.

The four schools were part of a larger literacy project that worked with South African primary school teachers, the aim of which was to improve classroom literacy practices and literacy levels of Grade 1–3 learners. Permission to work in the schools was obtained at national and provincial levels. The schools were informed about the classroom study at the beginning of the school year and two schools from each province volunteered to participate.

3.2. Data selection and preparation

All 9 video recorded sessions used English as the medium of instruction and were roughly transcribed by both authors. Some teachers in the Eastern Cape schools used mother tongue instruction in isiXhosa during parts of the lessons. These parts were transcribed by a native speaker of isiXhosa and translated into English. Since we focused on materials mode teaching, we then selected all classroom interactions that made use of textbooks, handouts, posters or other textual material. These segments were transcribed in greater detail by the authors following the Jeffersonian conventions (Jefferson, 1984), see Appendix A.

Within classroom interaction, turn allocation is (generally) mediated by the teacher, also referred to as a 'mediated turn allocation procedure' (Heritage, 2004). Mehan (1979a) distinguishes three ways in which teachers allocate turns in the classroom; through individual nomination, invitations to bid or invitations to reply. In contrary to invitations to bid (such as "who can tell me…", resulting in children raising their hands), invitations to reply allow all children to respond without having been given the turn explicitly. Whilst this can - in theory - result in just one child taking a turn, in our data, invitations to reply almost always resulted in chorally produced turns. Within chorally produced turns, we distinguished two types of activities in our data: choral reading aloud, and choral answering.

We built two main collections: the first focusing on choral reading and the second focusing on choral answering. Within each collection we then analyzed what types of actions preceded choral reading and choral answering and what types of actions came after choral reading and choral answering, following conversation analytic procedure (i.e. (Heritage & Clayman, 2010). In other words, we came to a set of actions that 1) initiated choral reading and choral answering and 2) produced choral reading and answering and 3) responded to choral reading and choral answering. We studied the data until no new actions were identified.

[5] We follow the official South African curriculum in which 'Home Language' (HL) is used to refer to the language of learning and teaching (LoLT), and 'First Additional Language' (FAL) is used for languages that are taught as subjects.

[6] Schools in South Africa are categorized from Quintile 1-5, with Quintile 1-3 being the poorer (no-fee) schools.

Although our collection includes excerpts in which isiXhosa is used, in this paper we only present examples in which English was used by both teacher and students. These include three Western Cape and two Eastern Cape excerpts.

We have transcribed single students as S, and the entire class as Ss. At the same time, we do not know if every single student joined the chorus (see Jacknick & Creidner, 2018 for a discussion on chorus transcription). When it was clear that not the entire class participated or there was some sort of inconsistency, this is indicated with double brackets as ((chorus starts off quietly)), ((chaotic reading)) or ((partly chorus)).

4. Results

In this section we will first demonstrate the ways in which choral reading aloud is initiated, produced and responded to (4.1) and then demonstrate the ways in which choral answering is initiated, produced and responded to (4.2).

4.1. Initiating, producing and responding to choral reading aloud

Our data show that texts are read aloud in various forms: teachers read the text aloud to the class, assign individuals to read a (part of the) text, assign students to represent different characters in a story (if applicable), or stories are read aloud chorally by the whole class. The following examples demonstrate a variety of subtle ways in which this choral reading is initiated, produced and responded to.

In the first excerpt, the teacher (T) provides an imperative, initiating a choral response (Ss). Prior to this, the teacher has prepared the students for the reading activity by pointing out the page numbers the students should be looking at, and by repeating the instruction "let's all read class' in isiXhosa, the local language. The teacher walks around for about 15 seconds, looks at her phone to check the time and marks her next activity with the discourse marker 'alright' (line 1) and continues in English.

Excerpt 1. Pre-reading of the first sentence and direct instruction (Mrs K., Eastern Cape, Video 1, minutes 6:31 - 6:44)

1	T:	alright,
2		about ↑our >holi<days,
3		>let's all read class<
4	Ss:	[about ↑our holidays.
5	T:	[about ↑our
6		let's all read cla:ss.
7	Ss:	about ↑our holidays

In this first excerpt the teacher uses the discourse marker 'alright' in line 1 to mark a shift in activity. She reads the title of the story aloud (line 2) and immediately follows up with an imperative (line 3) to both instruct the students and allocate the turn to all the children in the class. The students (Ss) produce a chorally produced turn, along with the teacher who only repeats 'about our'. The students repeat the exact same line that the teacher had already produced in line 2 (the title of the story), with the exact same intonation, and stop here. Not only do the students chorus the words, but also the intonation pattern provided by the teacher. This tells us that the students have understood lines 2 and 3 as a specific instruction as to where to start reading, with what intonation, and where to stop. In line 6, the teacher repeats her imperative, emphasizing the class as a whole by stretching 'cla:ss', generating an audible larger group of students to repeat the same line of the story. Whereas her imperative could be seen as an instruction to continue with the story, the students demonstrate in line 7 that they have understood this as an instruction to repeat the same line, again using the same intonation pattern. At the

same time, it informs students that their previous chorus answer was not sufficient enough in order to continue with the actual story.

This first example demonstrates not only the minimal way in which a teacher combines a first line of a story with an imperative to elicit choral reading, but also that students uniformly understand this as an instruction to just repeat the first line, mimicking words and intonation. Direct feedback from the teacher is lacking, rather, instruction is repeated implicitly showing what was previously done needs repetition. Interestingly, this choral reading elicitation does not require actual reading ability by the students thus far, as they only need to repeat what the teacher has said. It does however elicit students' response and creates shared attention (also see Pontefract & Hardman, 2005).

Whilst in excerpt 1 the students responded to a choral reading initiation by repeating or co-producing the same words as the teacher, excerpt 2 shows us that this is not always the case. In the following excerpt, the teacher, Mrs B., has halted the choral reading after children struggled with the word 'compliment.' Since the word compliment is an important concept in this story about ants and a grasshopper, the teacher explains what the word means with an illustration about receiving a compliment herself. She summarizes her explanation in line 1, where this excerpt starts.

Excerpt 2. Discourse marker and incomplete utterance (Mrs B., Western Cape, video 2, minutes 4:29 - 4:41)

```
1 T:  so THAT IS A?(0.5) beauti↑ful ⟨↑com↓pliment⟩.
      ((raises handout with one hand and looks at
      text))
2     al↓right (.) > one day, <
3 Ss: he saw a long ((chaotic reading))
4 T:  [>HE SAW< A <LO:NG LINE OF ANTS PASSING BY>
5 Ss: [<he saw a lo:ng line of ants passing by>
6     ((chorus reading with teacher continues for
      approx. 2 min))
```

The teacher marks the shifting of activities - from explaining the word compliment back to the activity of choral reading - by the discourse marker 'alright' in line 2 and by shifting her gaze from the class to her handout. The falling intonation and the mini-pause indicate the start of a new activity; in one breath she continues in a softer but faster pace with the next line in the story 'one day', with emphasis on both words. At the same time the teacher is now looking at her handouts on which the story is written. Some students pick up on this minimal instruction and produce the rest of the sentence chorally (line 3). The way these students do so is markedly different from what we have seen in excerpt 1. The students in excerpt 2 did not treat the instruction as an instruction to repeat what the teacher had just said, but rather, treat this cued elicitation (Edwards & Mercer, 1987) as a designedly incomplete utterance (DIU) (Koshik, 2002), by continuing with where the teacher left off in line 2. Koshik (2002) states that a DIU is designed to be incomplete in order to elicit a knowledge display from the student. In this example however, children do not need to bring in their own knowledge, but rather need to follow the text and complete the sentence written in their textbook.

The choral reading in line 3 is a bit chaotic: some students join in late, some students do not join at all. The teacher then responds in line 4, with a raised voice, and repeats from 'he saw' onwards. The students now have clear choral guidance and follow along in overlap, at the same reading-aloud-pace as the teacher. Although the very subtle cued elicitation by the teacher in line 2 (discourse marker, reading the first words of the next sentence with emphasis, fast paced) does elicit some choral reading by a number of students, the chaotic reading suggests that this implicit form of choral reading instruction is not explicit enough to start up the choral reading activity again after the short side-activity (explaining the word compliment).

In sum, the two examples above represent the two ways in which choral reading aloud can be initiated by the teacher in our data. Firstly, the teacher can provide an explicit or direct instruction (excerpt 1). Secondly, the teacher can provide a very minimal instruction such as using a discourse marker and the first few words where students should start reading aloud (excerpt 2). Other examples that we found in our data (not shown here), include non-verbal signs such as head nods in combination with reading the first few words of the text where students should start reading.

Other patterns that we discovered in our data show that explicit instructions are required when initially starting the reading activity, whereas less explicit instructions can be found when students are already engaged in the activity. However, excerpt 2 shows us that when the choral reading activity is interrupted by the teacher and is restarted, a less explicit instruction leads to less alignment in the choral reading. Our data further shows that the feedback element of the IRF-structure within the choral reading aloud activity is highly limited. We do see that teachers join the chorus, guiding the children along. This can be interpreted as a very minimal form of support or feedback.

4.2. Initiating, producing and responding to choral answering

Besides initiating choral *reading*, teachers can also initiate choral *answers* - responses to questions produced chorally. These initiations subtly differ from invitations to bid. Whereas invitations to bid result in students raising their hands individually, the invitations we will discuss here result in chorally produced answers. Students demonstrate in their - single or chorally produced - responses that they know whether to raise a hand, respond individually or respond to a question aloud in chorus. In our data we found three distinct ways in which chorus answers are elicited: through yes/no questions; incomplete utterances; and known-answer questions. All elicitations by the teachers were supported by prosodic cues, such as intonation and/or stress on a particular syllable or word. These prosodic cues served as subtle but clear directives towards the students, as will be shown in the following two excerpts.

The interaction shown in excerpt 3 takes place during an English lesson where the teacher repeats a previous answer from a learner, who explained that one day a car drove over her foot. In the excerpt we will show an example of a choral answer elicit through a yes/no question and a DIU.

Excerpt 3. Yes/no question and DIU (Mrs D., Western Cape, Video 1, minutes 7:50 - 8:08)

```
1 T:  a car drove over Shanisa's foot .
2     a ↑ ca:r .
3     do you think that's a good thing if a car drives
      over your foot? ((walks towards blackboard at
      the front of the classroom))
4 Ss: NO:::
5 T:  no because the car is ↑very? (0.5)
6 Ss: heavy.
7 T:  heavy. (2.0) ((another teacher hands Mrs D. a
      key))
8     the car is very heavy.
```

In line 1, 'car' and 'foot' are produced with emphasis, followed by a repetition of a prolonged 'car' for additional emphasis (line 2). By contrasting 'car' with 'foot' and repeating 'car' with raised intonation, the teacher expresses her indignation about the event. In line 3, the teacher solicits all students to respond chorally to her yes/no question concerning this event, emphasizing 'good'. Her question seeks a moral stance from the students, deciding whether

something is 'good' or 'bad'. However, by contrasting her indignation with something 'good' she designs her yes/no question as a question that prefers a no-response thereby reducing the moral stance-taking options to just one: it is *not* a good thing to drive over someone's foot. While she asks her question Mrs D. walks away from the student towards the front of the classroom. She does not look at any individual student. Almost all students treat her question as a question designed for the entire class as most students produce the same preferred second-pair part: a prolonged 'no' in chorus. The teacher then repeats the 'no' shortly (line 5) through which she gives indirect feedback to the students that the answer was indeed correct. This is directly followed by a new question; after acknowledging that the students have given the correct answer in chorus, the teacher produces a DIU (Koshik, 2010) to allocate the turn to the students again (line 5). The DIU in line 5 is produced with a typical rising intonation contour whereby the last word (very) is particularly raised. By leaving out the last word of her sentence, the teacher gives the floor to the students to fill in the gap. The students correctly answer in chorus in line 6 and use a proper falling intonation showing how they have now collaboratively produced a full sentence. The teacher's evaluation of their answer in line 7 is a repetition of the correct answer. While another teacher hands Mrs D. a key, Mrs D., after a short pause, repeats the entire sentence that they just collaboratively produced. This can be seen as a form of feedback in the IRF-sequence, as the students now know that this was indeed how the DIU should have been completed.

In Excerpt 4, we present an interaction in which a known-answer question is used. A known-answer question, which is also referred to as a 'known information turn' by Mehan (1979b), refers to the situation where the teacher asks a question to which she has already indirectly provided the answer to. Interestingly, the students do not provide the answer already indirectly given away by the previous sentence, but the students provide a different (also correct) answer. The teacher discusses a short story from a textbook about a girl, Nomsa, who visits a farm.

Excerpt 4 Known-answer question (Mrs M., Eastern Cape, Video 1, minutes 11:34 - 11:47)

```
1 T: so Nomsa was so fortunate.
2    (0.5)
3    ↑NOMsa ate eggs from the ↑hen?
4    that means where do we get (.) eggs?
5    (0.5)
6    from the?
7    h[en
8 Ss: [chicken
9 T: or the chickens (2)
```

The teacher walks around with the textbook in her hand, reading aloud and asking questions about the sentences she has just read. Mrs M. reads a sentence aloud from the textbook (lines 1–3) and asks a question about it (line 4). In line 4 Mrs M. looks up from her textbook at the class while soliciting a turn through a known-answer question. As she has just read aloud that Nomsa ate eggs from the hen, the answer, logically deducted from the previous utterance, would be 'from the hen.' We see, however, that there is no immediate response from the students and Mrs M. adds 'from the' after this brief pause. Her known-answer question answer (line 4) would have consisted not just of one word (which we often see in our data), but of three words. As this received no uptake from the students, this could suggest that chorally produced responses have a preference for questions that solicit short (one-word) answers: either yes/no answers or one-word utterances that complete the DIU. Mrs M. adds 'from the' in line 6, but immediately after her rising intonation finishes the turn herself in line 7. In overlap, a number of children respond in chorus with 'chicken.' Although technically this answer is also correct, it is a different response than the response sought by Mrs M. This can be seen by the uptake in line 9 in which she confirms that 'chickens' is also correct through the use of 'or.' This excerpt shows us two interesting phenomena: 1) questions soliciting chorally produced responses need to adhere to short answers in order for there to be an immediate choral uptake; 2) known-answer questions do not only produce the known answer as indirectly suggested by the teacher but can also (chorally) produce new answers that may be more 'common' or formulaic than the answer previously given.

Our final excerpt (5) shows how both responding and reading aloud in chorus are used back and forth. In this example, the class is divided into three rows and Mrs J. asks separate rows to each read a paragraph from the story 'The first blue jeans'.

Excerpt 5. Direct instruction and pre-reading of the first sentence (Mrs J., Western Cape, Video 3, minutes 6:04 - 6:33)

```
1 T:   [ehm I am going to ask this row to read it to me,
       (0.5)((points at first row))
2 S1: y[es
3 S2: [yes
4 T:   ↑right?
5      ⟨the first paragraph⟩,
6      °then we are going to read the°, ((points at
       second row))
7 Ss: second paragraph, ((students from second row in
       chorus))
8 T:   >°and the third paragraph°<, ((points at third
       row))
9      right?
10     >°The first blue jeans°<.
11     everybody FOL↑LOW?
12     Akanani put your pencil down.
13     (1)
14     the first blue jeans. ((points at first row))
15 Ss: <the first blue jeans.>
16     [do ↑you and your friends wear blue jeans when
       you're going out to play?
17 T:  [do ↑you and your friends wear blue jeans when
       you're going out to play?
```

The teacher starts her row-by-row instruction in line 1. Although it is a general instruction directed at the entire class, she particularly points at the students sitting in this first row. Two of these students audibly confirm they have understood her instruction in lines 2 and 3. After a rhetorical 'right?' she adds to her instruction that these students will only read the first paragraph. She shifts her body and gaze to the second row and uses an inclusive 'we' to continue the instruction to the students of the second row (line 6). Her DIU is finished off by the students in the second row who chorally produce 'second paragraph', showing that chorally produced answers are not only initiated in content-related materials mode contexts but also during instruction giving. Her row-by-row reading aloud instruction is finished in line 9 with another rhetorical 'right?'. In line 10 the teacher produces the title of the story again (she has already read the title before the transcript begins). She produces this title softly and quickly and immediately follows up with 'everybody follow' in line 11. Students do not see this as an invitation to chorally repeat the title (which is the case in line 15). Also, the rising 'everybody follow' which - based on the grammar and intonation - can be seen as a question, is not seen as an invitation to respond by the students. Rather, the teacher elicits focus from all students, particularly Akanani. In line 14, we see the exact same words as line 10 - the title of the story - produced by the teacher. However, this time, the title is produced at normal volume and normal speed. Furthermore, the teacher minimally points at the first row. The students demonstrate that they understand

the way this activity works which is by chorally repeating the title and continuing with the rest of the paragraph as instructed earlier. The teacher joins the chorus from line 17 onwards guiding the students in reading aloud. This indirect form of feedback tells the students that guidance is needed.

This final example shows us how elicitation of choral answering and choral reading, as well as choral production of answers and reading follow each other up rapidly. Through subtle markers such as falling or rising intonation, slow, faster or normal speed, and minimal pointing, students understand what is expected of them. Students know when to complete an utterance, repeat an utterance, or whether to repeat a single sentence or continue reading. This shows us that teachers and students are highly skilled in understanding interactional chorusing subtleties. Teachers also need minimal instruction to initiate (choral) answers and reading and thus participation.

In sum, in our data we found three ways in which choral responses are initiated: 1) through yes/no questions; 2) through a designedly incomplete utterance; 3) through a known-answer question. Interestingly, these initiations can also "go wrong", for example when another type of response is more formulaic – i.e. more logical to produce - than the response the teacher was seeking. In line with earlier studies that investigated discourse in multilingual postcolonial classroom settings (Macdonald & Burroughs, 1991; Pontefract & Hardman, 2005), feedback provided by the teachers was highly limited.; teachers repeat the students' answer or answer along with the chorus. We did not find any other feedback strategies within the IRF exchange structure as identified by for example Pontefract and Hardman (2005) such as praise or teacher commentary (p.97). This practice of restricted feedback automatically rules out any systematic follow-up strategies or building upon pupils' answers (Pontefract & Hardman, 2005). Consequently, productive classroom discussions are limited, since these require a high degree of follow-up – or uptake - by the teacher of a learner's response (Soter et al., 2008).

5. Conclusion and discussion

This study set out to explore how chorally produced turns are initiated, produced, and responded to during classroom interaction in materials mode in high-poverty multilingual classrooms. In general, there are three ways in which turns can be assigned in classrooms (Mehan, 1979a): children raise hands, children are assigned a particular turn, or children respond in chorus. In our data we observed choral responding to be the default setting when the class is in materials mode. Minimal instruction is given to the children for them to start reading aloud or to respond in chorus. This type of minimal instruction seems to be done through highly ritualized interactional signals: i.e. incomplete utterances, minimal instruction (*one-two-three* or *let's read*), rising intonation, or nods. Although these signals might seem relatively minimal, they are well embedded in the classrooms we observed. Both students and teachers are highly skilled at using and understanding these subtle interactional markers.

There are two ways in which choral *reading* can be initiated by the teacher. The teacher 1) provides a direct instruction (in English) either preceded or followed by the sentence where the students should begin reading; or 2) the teacher provides a very minimal, implicit instruction, for example through a head nod or a discourse marker, often accompanied by the first few words that the students should repeat or where they can start reading. All ways in which choral reading is elicited are done within the context of shared reading. Children are already focused on their texts or flash cards and are part of a context in which choral reading is a relatively 'standard activity'. At the same time, minimal linguistic and interactional cues prepare the students to start their choral reading activity. They are able to distinguish general instruction from 'reading-onset' instruction, shown by their almost perfect timing of starting to read their texts aloud in synchrony with the other students. When students are not perfectly aligned, we see that teachers respond by repeating the same line so that students get a second chance (excerpt 2). Very rarely do students receive a positive response, such as a compliment.

With regard to choral *answering*, our data show that there are three kinds of cues given by the teacher that elicit chorally produced answers: yes/no questions; designed incomplete utterances and known-answer questions. In all cues the prosodic functions play an important role. This is similar to findings by Chick (1996), who identified the use of a relatively simple prosodic system by the teachers in South African L2 classrooms, 'in which a restricted set of prosodic cues is used for a wide range of prosodic functions.' (p.27). We base our conclusions on the *actions* teacher initiate to seek choral answers and found that yes/no questions, DIU's, and known-answer questions are the actions used to elicit choral responses. These actions are indeed marked with strong prosodic cues. Our data also support Abadzi's (2006) argument that choral teaching can only work when very short answers are sought.

Although both the choral reading-mode and choral answer-mode were two independent or stand-alone classroom modes, our observations show that the teachers as well as the learners easily switch between these two modes.

At first sight, both chorus answering and chorus reading seem to be performed smoothly by teachers and learners, almost like a well-oiled machine. Teachers have a tendency to streamline the chorus to the extent that they read the first sentence of the text or provide strong cues for the expected answers. However, a more analytical view allows us to see that these apparent smooth interactions can end up malfunctioning. This is illustrated in our data by the instances where learners mutually misinterpret what is expected of them in their turn (see the example in the introduction or 'chickens' instead of 'hen' in excerpt 4). Our data show that choral answering- and choral reading can end in failure either at the level of form (when the learners do not read synchronously), content (when they provide the wrong answer) or both. Because choral answers do not allow for open-ended questions and individual student performance, this type of interaction naturally becomes a routine in which initiations and responses are highly ritualized, where individual in-depth engagement with language and content is not promoted, and simple answers and formulaic expressions are encouraged.

The classroom interaction practices in the current study are not unique to grade 3 students in South Africa. Our data fit the description of Jacknick and Creider (2018) who, based on their classroom interaction study in the United States, report that highly ritualized institutional interactions are interactions 'where teacher and students are more focused on a text and on answers than on each other.' (p.85). When the text becomes the leading structure of these interactions, students are simply providing the correct answer, and are not necessarily developing their own thoughts or expressing their own beliefs (Jacknick & Creider, 2018). Interactional mechanisms such as the focus on text as guiding principle; the emphasis on providing the correct answer and a general indifference to who is providing the response, contribute to limited student engagement (Brown & Lee, 2015). Although we do acknowledge similarities between our findings and those from more affluent L1 contexts, we argue that classroom interactions in the South African context are negatively impacted by factors typical of high-poverty L2 settings, such as limited resources; large classes; and a limited knowledge of the language of instruction, all leading to the use of traditional teaching techniques such as chorus teaching, repetition, and rote learning (Alidou & Brock-Utne, 2006; Chick, 1996). Also troubling is the minimal (positive) feedback the students re-

ceive after producing choral reading aloud or choral answers. The only indirect feedback in the examples in this paper was when teachers correct the students' answer or join the chorus reading in order to guide the students along.

Our close look at exactly how chorusing is initiated, produced and responded to has shown that these types of chorus initiations can be placed on a continuum. We identified forms of chorusing that are more open, initiated by answering an unknown question, and forms of chorusing that are more closed, initiated by yes/no-questions (often strongly steering towards a particular type of preferred response). Our data show that intonation, speed, emphasis, the number of required words to "fill in the slot" and the ways in which the questions are structured, place initiations on different ends of the continuum. Similarly, with chorus reading instructions, our data support this notion of a continuum from explicit to implicit instruction. This shows that both teachers and students are highly skilled at subtle interactional classroom strategies through which they accomplish shared chorus reading aloud and choral answering, whatever end of the continuum the students and teachers are at. However, the more "help" (intonation, speed, emphasis, one-word option, closed questions, guidance through reading along), the better aligned the choral responses and reading.

As discussed earlier, teachers in high-poverty multilingual settings often resort to choral practices as a coping mechanism, with the risk of limited individual student engagement and restricted opportunities for development of language and cognitive skills. However, our study shows that children that find themselves in these particular difficult classroom circumstances demonstrate a high awareness of the subtleties of a variety of interactional "rules" and the cognitive ability to follow these rules. Moreover, the fact that they are occasionally encouraged to produce their own answers and are capable of reading new pieces of text aloud, shows potential learning opportunities through classroom engagement, for both second-language acquisition as well as subject-content knowledge. Indicating these strengths allows for a more positive view on chorus practices in high-poverty settings than has been previously assumed.

Appendix A. Transcription symbols based on Jefferson (1984)

.	Falling pitch or intonation at the end of a contour
,	Slight rise in intonation at the end of a contour
?	Strong rising intonation at the end of a contour
↑	Rising intonation before a syllable
↓	Falling intonation before a syllable
:	Prolongation of sound
CAPS	Increased volume of speech
° °	Reduced volume of speech between these signs
[text	Marks onset of overlap
(1.0)	Time (in seconds) of pause in a speech
(.)	Very brief pause, less than 0,2 s
((text))	Non-verbal utterances
> text <	Enclosed speech was delivered more rapidly than usual for the speaker
< text >	Enclosed speech was delivered more slowly than usual for the speaker
Underline	The speaker is emphasizing or stressing the speech
( )	Unhearable for the transcriber

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